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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,055	09/08/2003	Kevin R. Curtis	495812004700	5511
25226	7590	02/03/2005	EXAMINER	
MORRISON & FOERSTER LLP			CHANG, AUDREY Y	
755 PAGE MILL RD			ART UNIT	
PALO ALTO, CA 94304-1018			PAPER NUMBER	
			2872	

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/658,055

Applicant(s)

CURTIS ET AL.

Examiner

Audrey Y. Chang

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A-SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-120 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-120 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-69, drawn to system or method for recording holographic storage media, classified in class 359, subclass 35.
 - II. Claims 70-120, drawn to system and method for reading information stored in holographic media, classified in class 365, subclass 125.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions has different modes of operation wherein in the in the holographic recording system, the arrangement of data mask and recording optics are involved, where in the reading system for the holographic storage media, the arrangements of detectors are involved.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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6. This application contains claims directed to the following patentably distinct species of the claimed invention:

In Group I:

- (1). Holographic recording method and system using VanderLugt imaging system,
- (2). Holographic recording method and system using Fourier transformation method,
- (3). Holographic recording method and system using confocally multiplexed object beam,
- (4). Holographic recording method and system using lithographic data mask,
- (5). Holographic recording method and system using spatial light modulator data mask,
- (6). Holographic recording method and system using holographic storage medium as data mask, or copy holographically,
- (7). Holographic recording method and system using a plurality information layers as data mask,
- (8). Holographic recording method and system using both polytopic and wavelength multiplexing method,
- (8). Holographic recording method and system using holographic storage medium with a polytopic or angle filter,
- (9). Holographic recording method and system using optical element for each data page of the data mask,
- (10). Holographic recording method and system using a phase mask,
- (11). Holographic recording method and system using 4-F optical system,
- (12). Holographic recording method and system using telecentric optical elements,
- (13). Holographic recording method and system using holographic master data mask with VanderLugt imaging system,

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- (14). Holographic recording method and system using holographic master data mask with Fourier transformation,
- (15). Holographic recording method and system using holographic master data mask with telecentric system,
- (16). Holographic recording method and system using holographic master data mask with confocal multiplexing,
- (17). Holographic recording method and system using data mask with quasi Fourier transformation including VaderLugt imaging system,
- (18). Holographic recording method and system using data mask with quasi Fourier transformation including Fourier transformation filter,
- (19). Holographic recording method and system using data mask with quasi Fourier transformation including telecentric system,
- (20). Holographic recording method and system using data mask with quasi Fourier transformation including Bragg based multiplexing and momentum based multiplexing.
- (21). Holographic recording method and system including confocally multiplexing a plurality of data masks into a holographic storage medium.

In Group II,

- (1). Method and system for reading information from a holographic storage medium with confocally filtering to select a desired information layer,
- (2). Method and system for reading information from a holographic storage medium with detector placed at a distance and the storage medium is divided into a plurality of pages to be adapted for detection,

- (3). Method and system for reading information from a holographic storage medium with scanning means,
- (4). Method and system for reading information from a holographic storage medium with phase conjugate reference beam,
- (5). Method and system for reading information from a holographic storage medium with wavelength multiplexing of the storage medium,
- (6). Method and system for reading information from a holographic storage medium with polytopic multiplexing of the storage medium,
- (7). Method and system for reading information from a holographic storage medium with both wavelength and polytopic multiplexing,
- (8). Method and system for reading information from a holographic storage medium with detector oversampled the stored information,
- (9). Method and system for reading information from a holographic storage medium with aligning detector with a single data page stored in the holographic storage medium,
- (10). Method and system for reading information from a holographic storage medium with a tunable source,
- (11). Method and system for reading information from a holographic storage medium with a pulsed laser,
- (12). Method and system for reading information from a holographic storage medium with a phase mask,
- (13). Method and system for reading information from a holographic storage medium with a polytopic filter,
- (14). Method and system for reading information from a holographic storage medium with a filter including an array of pinholes.

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

7. A telephone call was not made to applicant's attorney to request an oral election to the above restriction requirement, due to the complication of the restriction requirement.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of

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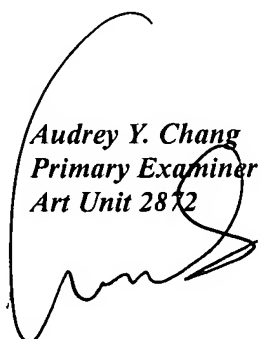
inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Audrey Y. Chang
Primary Examiner
Art Unit 2872



A. Chang, Ph.D.